

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a mast arm Traffic Control Signal at the intersection of MD 193 (Enterprise RD) and the middle Driveway of Kingsford Elementary School in Prince George's County. This project shall be in coordination with the School Driveway Reconstruction Project. Pavement Markings and Street Lighting shall be installed to direct drivers through the new traffic pattern. The signing at the intersection has been brought up to present specifications. MD 193 is assumed to run in a north-south direction.

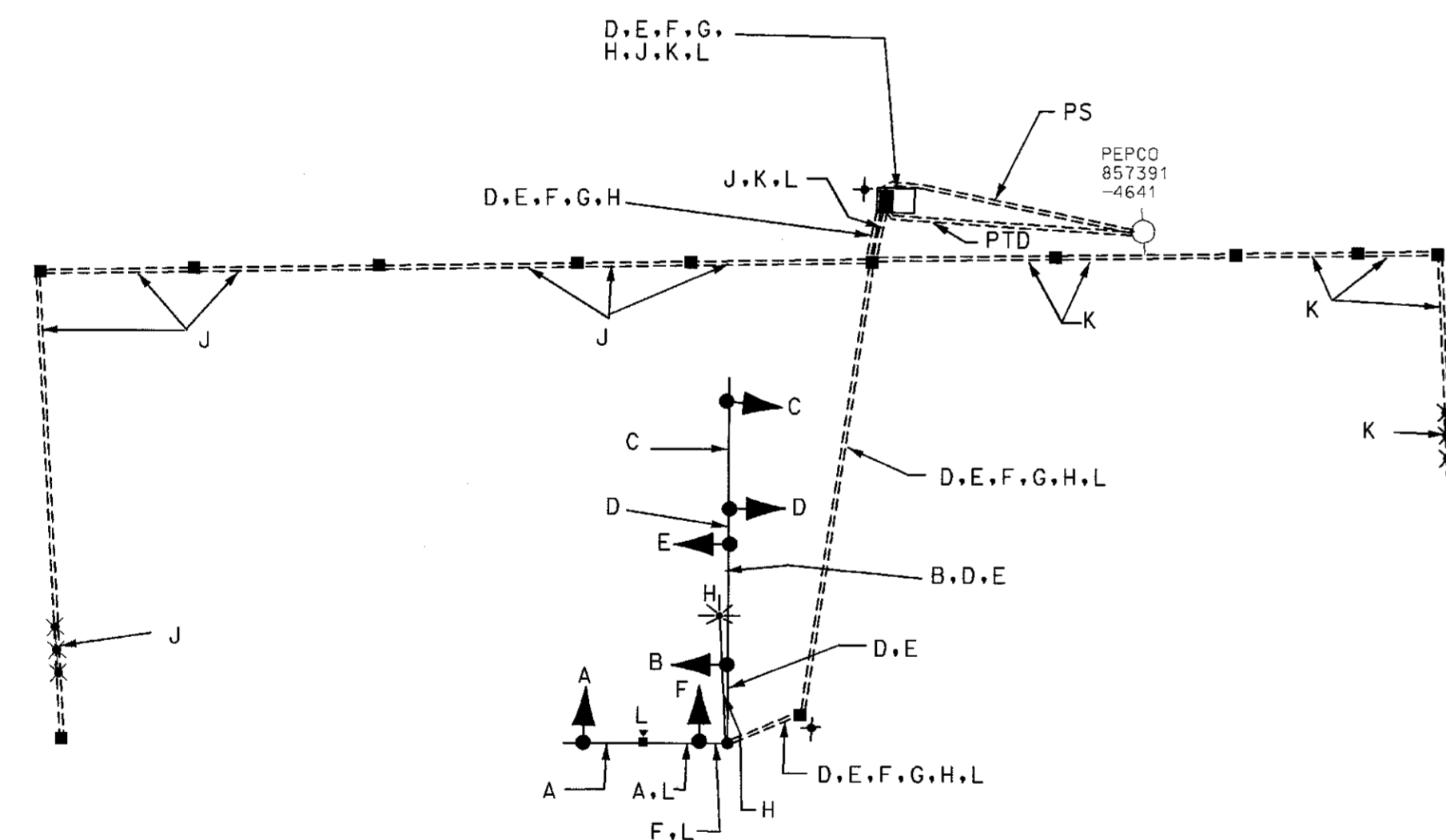
II. INTERSECTION OPERATION

- The intersection shall operate in a NEMA (3) three-phase, fully-actuated mode with MD 193 through approaches running concurrently. The Kingsford School approach shall operate alone. A video detector camera shall provide presence detection for the school driveway.
- An eight-phase, full-traffic-actuated, controller with intersection monitor, battery back-up, video detector interface equipment and all necessary hardware housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- The Contractor shall notify Mr. Ed Rodenhizer at 410-787-5652 of the SHA, OOTS, Signal Shop to arrange the delivery of the video interface equipment. The video equipment shall be installed prior to the pick up of the controller and cabinet for installation.
- Upon completion of this project, the contractor shall notify Mr. Snyder of the SHA, OOTS, Operations at 410-787-731 to arrange for the telephone drop-line installation. The contractor is to provide Mr. Snyder with the nearest address, zip code and telephone number.

WIRING DIAGRAM



Wiring Key

- A } 5-Conductor (No. 14 AWG) electrical cable.
- B } 7-Conductor (No. 14 AWG) electrical cable.
- C } 7-Conductor (No. 14 AWG) electrical cable.
- D } 7-Conductor (No. 14 AWG) electrical cable.
- E } 7-Conductor (No. 14 AWG) electrical cable.
- F } 7-Conductor (No. 14 AWG) electrical cable.
- G - No. 6 AWG stranded bare copper ground wire.
- H - 2-Conductor (No. 12 AWG) electrical tray cable.
- J - Non-invasive probe set with 1000' lead-in.
- K - Non-invasive probe set with 500' lead-in.
- L - Video camera cable to controller.
- PS - Proposed underground service to be installed by PEPCO.
- PTD - Proposed underground telephone drop to be installed by Verizon.
- Ground rod.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EA	Eight phase, full-traffic-actuated controller with intersection monitor with battery back-up for phone drop and hardware housed in a NEMA size "6" base-mounted cabinet, module and harnesses.
9089	38.5 SF	Sheet aluminum signs to consist of:
	2 EA	R3-2L "No Left Turn Symbol" (30"x 30") post-mounted sign.
	1 EA	R3-2L "No Left Turn Symbol" (30"x 30") mast arm-mounted sign.
	1 EA	R10-7(1) "DO NOT BLOCK DRIVEWAY" (24"x30") post-mounted sign.
	2 EA	S5-1 "SCHOOL / SPEED LIMIT 35 WHEN FLASHING" (24"x48") sign, pole mounted.
9090	9 SF	Sheet aluminum signs to consist of:
	1 EA	D3-2 "Enterprise RD" mast mounted sign (variable x 16").

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	Maintenance of traffic per assignment.
2002	2 C.Y.	Test pit excavation.
5001	2 EA	Heat applied permanent preformed thermoplastic pavement marking arrow (right).
5001	1 EA	Heat applied permanent preformed thermoplastic pavement marking arrow (left).
5004	65 L.F.	12" white heat applied thermoplastic pavement marking.
5005	60 L.F.	24" White heat applied thermoplastic pavement marking.
5006	60 L.F.	5" White heat applied thermoplastic pavement marking.
5007	510 L.F.	5" Yellow heat applied thermoplastic pavement marking.
5008	120 L.F.	Removal of existing pavement marking. (any width line)
8001	1 EA	250' video detector cable to controller.
8006	2 EA	Cut, clean & cap traffic signal structure.
8011	18 EA	12" traffic signal head section.
8013	1 EA	15' bracket arm for signal structure.
8014	1 EA	250W- HPS luminaire with photocell.

PHASE CHART

	1	2	3	4	5	6
	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2 & 6	G	G	G	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	G	G
4 CHANGE	R	R	R	R	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

EQUIPMENT LIST cont.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
8020	1 EA	Control and distribution equipment.
8033	1 EA	27' steel pole and twin 50' (cut to 46') / 50' (cut to 32') mast arms.
8043	1 EA	Non-invasive probe with 1000' lead-in cable.
8044	1 EA	Furnish and install non-invasive probe set with 500' lead-in cable.
8049	1 EA	Video detection camera.
8050	1 EA	Video interface equipment.
8051	805 L.F.	3" Schedule 80 PVC electrical conduit - trenched
8052	110 L.F.	4" Schedule 80 PVC electrical conduit - bored
8053	160 L.F.	4" Schedule 80 PVC electrical conduit - trenched
8059	5 C.Y.	Concrete for signal foundation.
8060	30 L.F.	Wood sign supports 4" x 4" .
8062	120 L.F.	No. 6 AWG stranded bare copper ground wire.
8066	235 L.F.	3" Schedule 80 PVC electrical conduit - bored.
8072	20 L.F.	1-Conductor No. 4 AWG service cable (THHN-THWN).
8074	13 EA	Electrical handhole.
8076	16.25 S.F.	Install ground-mounted sign.
8077	31.25 S.F.	Install overhead sign.
8082	2 EA	Ground rod - 3/4" dia x 10' length.
8086	80 L.F.	Cable - 5 conductor (No. 14 AWG).
8087	400 L.F.	Cable - 7 conductor (No. 14 AWG).
8088	110 L.F.	Cable - 2 conductor (No. 12 AWG). lighting tray cable.
8093	150 L.F.	2" Schedule 80 PVC electrical conduit - trenched
8095	1 EA	Install controller and cabinet base-mounted.
NEG	60 L.F.	10" Yellow heat applied thermoplastic pavement marking.

C. EQUIPMENT TO BE REMOVED

There is ~~no~~ signal material to be removed.

The following contact persons for District #3 are as follows:

Mr. Majid Shakib
Assistant District Engineer - Traffic
Phone: (301) 513-7358

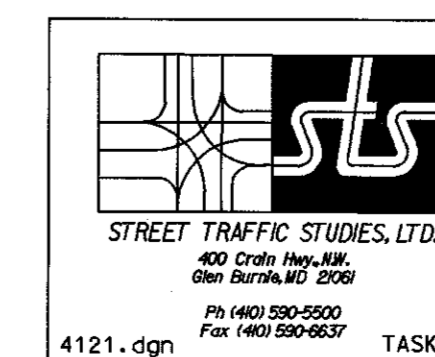
Mr. Randy Brown
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative:

Ms. Jackie Janright
Potomac Electric Power Company
4061 Powder Mill Road
Calverton, Maryland 20705
1-301-931-2882



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 193 (ENTERPRISE RD) AND THE MIDDLE DRIVEWAY OF KINGSFORD ELEMENTARY SCHOOL

GENERAL INFORMATION SHEET

DRAWN BY: E. MILESKEY	F.A.P. NO. AS-STPG-000S(786)E	TS NO. 4165	SHEET NO. 3 OF 3
CHECKED BY: RRZ	S.H.A. NO. 00-484-151/155	T.I.M.S. NO. E999	
SCALE: NONE	COUNTY: PRINCE GEORGE'S		
DATE: 5-20-02	LOG MILE: 030193016.67		